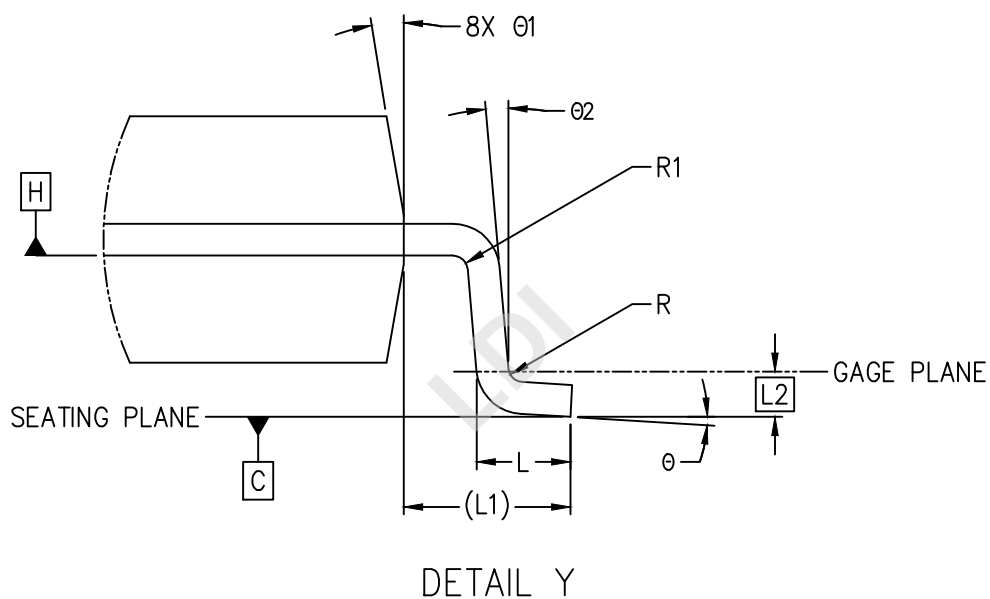
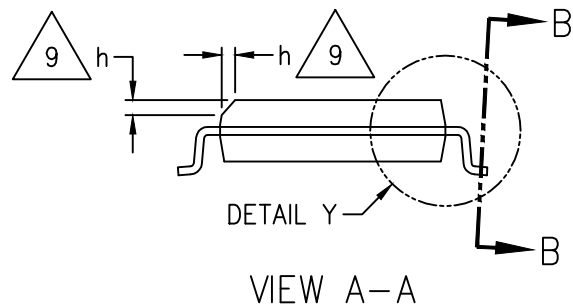
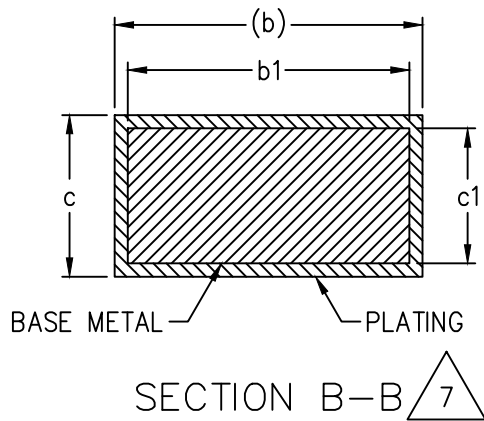
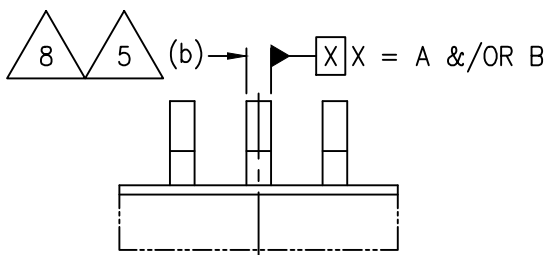


SHEET  
1 OF 6

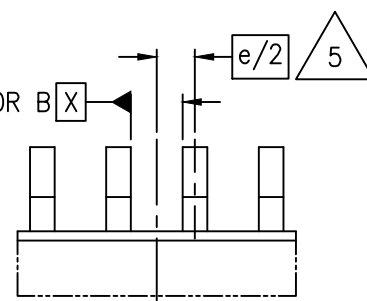


ODD LEADS  
PER SIDE

EVEN LEADS  
PER SIDE



X = A &/OR B



DETAIL Z

TABLE 1

COMMON DIMENSIONS				
SYMBOL	MIN	NOM	MAX	NOTES
A2	2.05	----	----	
b	0.31	----	0.51	7, 8
b1	0.27	----	0.48	7, 8
c	0.10	----	0.33	7
c1	0.10	----	0.30	7
E	10.30 BASIC			
E1	7.50 BASIC			3, 4
e	1.27 BASIC			
L	0.40	----	1.27	
L1	1.40 REF			
L2	0.25 BASIC			
R	0.07	----	----	
R1	0.07	----	----	
h	0.25	----	0.75	9
θ	0°	----	8°	
θ1	5°	----	15°	
θ2	0°	----	----	
NOTES	1, 2			
REF	11-720S, 11-910S			
ISSUE	F			

TABLE 2

TOLERANCE OF FORM AND POSITION		
SYMBOL	VALUE	
aaa	0.10	---
bbb	0.33	---
ccc	0.10	---
ddd	0.25	---
eee	0.10	---
fff	0.20	---
ggg	0.15	---
NOTES	1, 2	
REF	11-720S	
ISSUE	E	

TABLE 3

STANDARD VARIATIONS								
VARIATION ►		AA	AB	AC	AD	AE	AF	NOTES
SYMBOL ▼								
A	MIN	---						
	NOM	---						
	MAX	2.65						
A1	MIN	0.10						10
	NOM	---						
	MAX	0.30						
D BASIC		10.30	11.55	12.80	15.40	17.90	9.00	3, 4
N		16	18	20	24	28	14	6
NOTES		---						
REF		11-720S						
ISSUE		E						

TABLE 4

THERMAL VARIATIONS								
VARIATION ►		BA	BB	BC	BD	BE	BF	NOTES
SYMBOL ▼								
A	MIN	---						
	NOM	---						
	MAX	2.50						
A1	MIN	0.00						10
	NOM	---						
	MAX	0.15						
D BASIC		10.30	11.55	12.80	15.40	17.90	9.00	3, 4
D1	MIN	3.00						11
	NOM	---						
	MAX	---						
E2	MIN	2.00						11
	NOM	---						
	MAX	---						
N		16	18	20	24	28	14	6
NOTES		---						
REF		11-720S						
ISSUE		E						

NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5–2009.

2. ALL DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).



DIMENSION 'D' DOES NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS. MOLD FLASH, PROTRUSIONS OR GATE BURRS SHALL NOT EXCEED 0.15 MM PER END. DIMENSION 'E1' DOES NOT INCLUDE INTERLEAD FLASH OR PROTRUSION. INTERLEAD FLASH OR PROTRUSION SHALL NOT EXCEED 0.25 MM PER SIDE. 'D' AND 'E1' DIMENSIONS ARE DETERMINED AT DATUM H.



THE PACKAGE TOP MAY BE SMALLER THAN THE PACKAGE BOTTOM. DIMENSIONS "D" AND 'E1' ARE DETERMINED AT THE OUTERMOST EXTREMES OF THE PLASTIC BODY EXCLUSIVE OF MOLD FLASH, TIE BAR BURRS, GATE BURRS, AND INTERLEAD FLASH, BUT INCLUDING ANY MISMATCH BETWEEN THE TOP AND BOTTOM OF THE PLASTIC BODY.



DATUMS A & B TO BE DETERMINED AT DATUM H.

6. 'N' IS THE MAXIMUM NUMBER OF TERMINAL POSITIONS FOR THE SPECIFIED PACKAGE LENGTH.



THE DIMENSIONS APPLY TO THE FLAT SECTION OF THE LEAD BETWEEN 0.10 TO 0.25 MM FROM THE LEAD TIP.



DIMENSION 'b' DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE DAMBAR PROTRUSION SHALL BE 0.10 MM TOTAL IN EXCESS OF THE 'b' DIMENSION MAXIMUM MATERIAL CONDITION. THE DAMBAR MAY NOT BE LOCATED ON THE LOWER RADIUS OF THE FOOT.



THIS CHAMFER FEATURE IS OPTIONAL. IF IT IS NOT PRESENT, THEN A PIN 1 IDENTIFIER MUST BE LOCATED WITHIN THE INDEX AREA INDICATED



'A1' IS DEFINED AS THE VERTICAL DISTANCE FROM THE SEATING PLANE TO THE LOWEST POINT ON THE PACKAGE BODY EXCLUDING THE LID AND OR THERMAL ENHANCEMENT ON CAVITY DOWN PACKAGE CONFIGURATIONS.



'D1' AND 'E2' MINIMUM DIMENSIONS OF THERMALLY ENHANCED TYPES ARE VARIABLES DEPENDING ON DEVICE FUNCTION (DIE PADDLE SIZE). 'D1' AND 'E2' MAXIMUM DIMENSIONS CAN BE EQUAL TO 'D' AND 'E1' MAXIMUM DIMENSIONS. END USER SHOULD VERIFY ACTUAL SIZE OF EXPOSED THERMAL PAD FOR SPECIFIC DEVICE APPLICATION.

# CHANGE RECORD

IF THE CHANGE INVOLVES ANY WORDS ADDED OR DELETED (EXCLUDING DELETION OF ACCIDENTALLY REPEATED WORDS), THE CHANGE IS TO BE INCLUDED BELOW. PUNCTUATION CHANGES MAY OR MAY NOT BE INCLUDED.

INITIAL ISSUE: —	DATE: —	JC11 ITEM NUMBER: —
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CHANGE RECORD HISTORY:
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ISSUE: E	DATE: SEPTEMBER 2005	ITEM NUMBER: 11–720S
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LOCATION:	CHANGED FROM:	CHANGED TO:
PAGE 1, BOTTOM VIEW	TOP VIEW, SIDE VIEW	ADD BOTTOM VIEW TO SHOW EXPOSED THERMAL PAD ZONE
PAGE 3, VARAIATION TABLE	6 NON–THERMAL OPTIONS AA TO AF	ADD 6 THERMAL OPTIONS AA TO AF

ISSUE: F	DATE: JANUARY 2016	ITEM NUMBER: 11–910S
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LOCATION:	CHANGED FROM:	CHANGED TO:
ALL SHEETS		REDRAWN & UPDATED TO CURRENT FORMAT STANDARDS: DIMENSIONS, TEXT HEIGHT, TABLES, ETC. NOTHING ADDED OR DELETED BUT SOME DIMENSIONS/TEXT MAY HAVE MOVED
SHEET 3, TABLE 1	C & C1 = 0.20 MIN	C & C1 = 0.10 MIN
SHEET 6, NOTE 1	ASME Y15.4–1994	ASME Y14.5–2009

JEDEC SOLID STATE PRODUCT OUTLINE Copyright © 2016 JEDEC	TITLE VERY THICK PROFILE, PLASTIC SMALL OUTLINE FAMILY, 1.27 MM PITCH, 7.50 MM BODY WIDTH	NUMBER <b>MS-013</b>	ISSUE <b>F</b>	DATE JAN 2016	SHEET i
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